

Miniature High Power Relay

XJ

Features

- 1 pole 30A, 2 poles 25A/40A
- Top-mounted 1/4" quick-connect terminals
- Locating slot for DIN rail mounting
- With finger protection cover (IP20)
- With safety module monitor
- Widely used in large load such as air conditioners and refrigerators




 (File No.:E122258)
 Pending

1. COIL DATA (at 23°C)

1) DC coil

Nominal Voltage (VDC)	Pick-up Voltage (VDC) Max.	Drop-out Voltage (VDC) Min	Max. Allowable Voltage (VDC)	Coil Current (mA)(±10%)	Coil Resistance (Ω)	Coil Power (W)
6	4.8	0.9	6.6	316.7	18.9 x (1±10%)	Approx. 1.9
12	9.6	1.8	13.2	158	75 x (1±10%)	
24	19.2	3.6	26.4	79	303 x (1±10%)	
48	38.4	7.2	52.8	40	1220 x (1±10%)	
110	88	16.5	121	17.3	6360 x (1±15%)	
220	176	33	242	8.6	25474 x (1±15%)	

2) AC coil

Nominal Voltage (VAC)	Pick-up Voltage (VAC) Max.	Drop-out Voltage (VAC) Min	Max. Allowable Voltage (VAC)	Coil Resistance (Ω)	Coil Power (VA)(60Hz)
6	4.8	0.9	6.6	14 x (1±10%)	Approx. 2.5
12	9.6	1.8	13.2	55 x (1±10%)	
24	19.2	3.6	26.4	275 x (1±10%)	
48	38.4	7.2	52.8	1100 x (1±10%)	
100/120	80/96	15/18	110/132	5200 x (1±15%)	
200/240	160/192	30/36	220/264	21000 x (1±15%)	
380	304	57	418	62650 x (1±15%)	
400	320	60	440	62650 x (1±15%)	

2. CONTACT DATA

Contact Arrangement		1 Form A	2 Form A	2 Form A -G type
Contact Resistance (Initial)		50mΩ max.		
Contact Material		Ag Alloy		
Contact Ratings	Resistive	30A 277VAC 30A 30VDC	25A 277VAC 25A 30VDC	40A 250VAC 40A 30VDC
	Motor	1.5HP 120VAC 3HP 240VAC		
Max. Switching Voltage		277VAC, 30VDC		
Max. Switching Current		30A	25A	40A
Max. Switching Power (Resistive)		8310VA, 900W	6925VA, 750W	10000VA, 1200W
Life Expectancy	Electrical	100,000 operations (at 1,800 operations/hour)		50,000 operations (at 360 operations/hour)
	Mechanical	50,000,000 operations (at 1,800 operations/hour)		

3. CHARACTERISTICS

Insulation Resistance		100MΩ (at 500VDC)
Dielectric Strength	Open Contacts	2000VAC 1min (Leakage current 1mA)
	Coil and Contacts	4000VAC 1min (Leakage current 1mA)
	Contact Sets	2000VAC 1min (Leakage current 1mA)
Operate Time (at nominal voltage)		30ms max.
Release Time (at nominal voltage)		30ms max.
Temperature Range		-25℃ ~ 55℃
Shock Resistance		10G (Half-sine shock pulse: 11ms)
Impulse withstand voltage (waveform: 1.2/50μs)		6000V
Protection Level		IP20
Vibration Resistance		10 ~ 55Hz 1.5mm DA
Humidity		5 ~ 85% RH
Atmospheric Pressure		86 ~ 106KPa
Termination		PCB, Plug in, Screw, DIN rail mounting
Construction		Dust protected
Weight		Plug-in type: approx. 90g Screw type: approx. 120g
Outline Dimension (L x W x H)		50.5 x 34.0 x 36.5(,40.5, 50, 55)mm

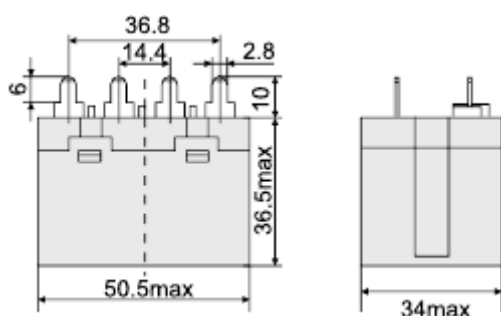
4. ORDERING INFORMATION

<u>XJ</u> ①	<u>11</u> ②	-	<u>D12</u> ③	<u>S</u> ④	<u>L</u> ⑤	<u>G</u> ⑥
① Relay Model	XJ					
② Contact Arrangement	11: 1 Form A (SPST-NO) 22: 2 Form A (DPST-NO)					
③ Coil Voltage	DC: D6=6VDC, D12=12VDC, D24=24VDC, D48=48VDC, D110=110VDC, D220=220VDC AC: A6=6VAC, A12=12VAC, A24=24VAC, A48=48VAC, A100/120=100/120VAC, A200/240=200/240VAC, A380=380VAC, A400=400VAC					
④ Termination Form	P: PCB S: Plug in SD: Plug in and DIN rail SF: Plug in and flange RF: Screw terminal and flange RD: Screw terminal and DIN rail					
⑤ LED	Nil: Without LED L: With LED (Only for RF and RD type)					
⑥ High Capacity	Nil: With 30A/277VAC contact load (only for 1 Form A) With 25A/277VAC contact load (only for 2 Form A) G: With 40A/250VAC contact load (only for 2 Form A)					

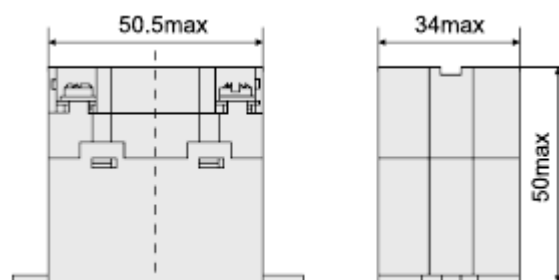
5. DIMENSIONS (Unit: mm)

Outline Dimensions

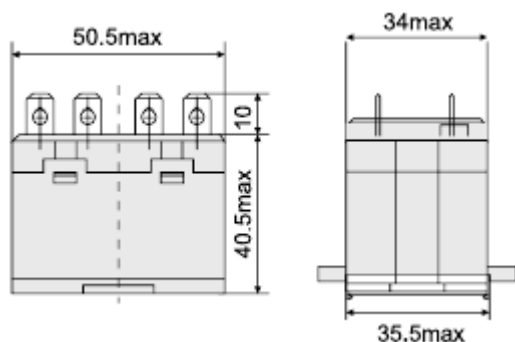
PCB type



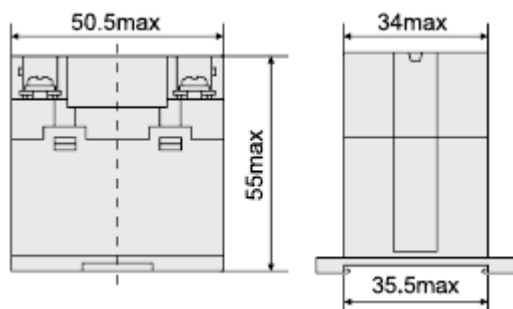
Screw terminal and flange



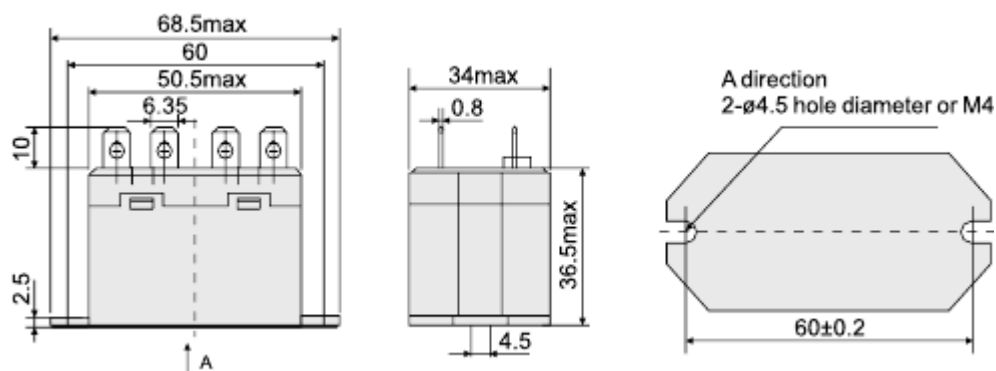
Plug in and DIN rail



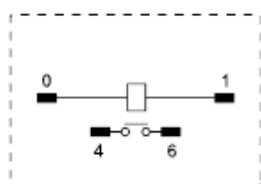
Screw terminal and DIN rail



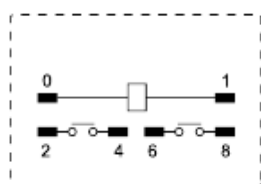
Plug in and flange



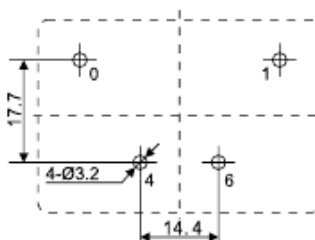
Wiring Diagram (Bottom View)



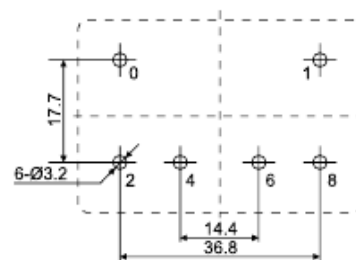
1 Form A



2 Form A



1 Form A (PCB)



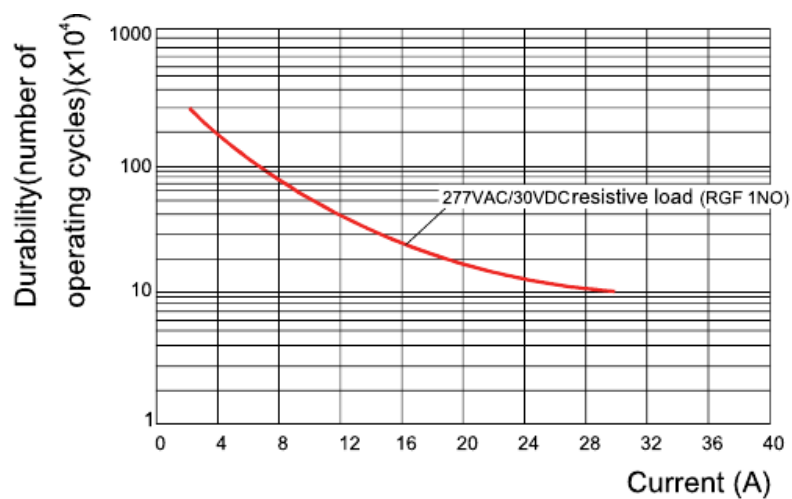
2 Form A (PCB)

Remark: 1) In case of no tolerance shown in outline dimension: outline dimension $\leq 1\text{mm}$, tolerance should be $\pm 0.2\text{mm}$; outline dimension $> 1\text{mm}$ and $\leq 5\text{mm}$, tolerance should be $\pm 0.3\text{mm}$; outline dimension $> 5\text{mm}$, tolerance should be $\pm 0.4\text{mm}$.
2) The tolerance without indicating for PCB layout is always $\pm 0.1\text{mm}$

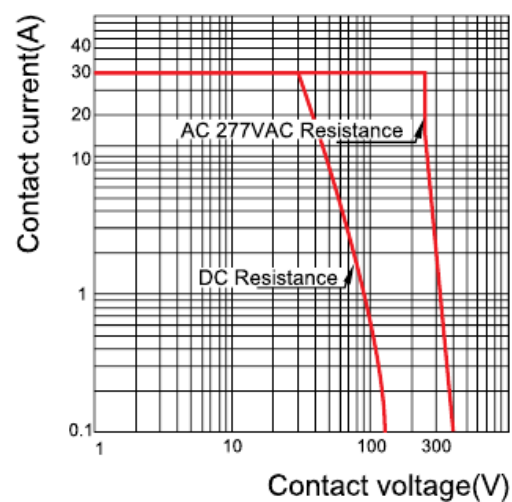
6. CHARACTERISTIC CURVES

1) 1 Form A

Electrical Durability Contacts

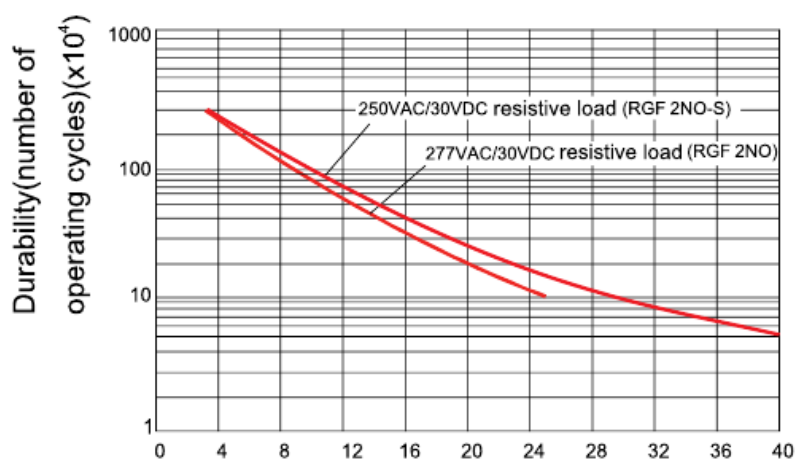


Maximum Switching Capacity



2) 2 Form A

Electrical Durability Contacts



Maximum Switching Capacity

